

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,806	07/28/2003	In-Hwan Lee	P-0549	4339
34610	7590 11/25/2005		EXAMINER	
FLESHNER & KIM, LLP			CHUNG TRANS, XUONG MY	
P.O. BOX 221200 CHANTILLY, VA 20153			ART UNIT	PAPER NUMBER
			2833	
			DATE MAILED: 11/25/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		AK				
	Application No.	Applicant(s)				
	10/627,806	LEE, IN-HWAN				
Office Action Summary	Examiner	Art Unit				
	Xuong M. Chung-Trans	2833				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tivilian apply and will expire SIX (6) MONTHS from cause the application to become ABANDON	N. imely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>14 Se</u> 2a)⊠ This action is FINAL . 2b)□ This 3)□ Since this application is in condition for allowant	action is non-final.	rosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) ☐ Claim(s) 1 and 3-27 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1 and 3-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner	epted or b) objected to by the drawing(s) be held in abeyance. Se on is required if the drawing(s) is ob	ee 37 CFR 1.85(a). Djected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents 2. ☐ Certified copies of the priority documents 3. ☐ Copies of the certified copies of the priorical application from the International Bureau * See the attached detailed Office action for a list of the certified copies.	have been received. have been received in Applicat ty documents have been receiv (PCT Rule 17.2(a)).	ion No ed in this National Stage				
ttachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	v (PTO-413) ate Patent Application (PTO-152)				

Application/Control Number: 10/627,806 Page 2

Art Unit: 2833

1. This is responsive to the amendment filed September 14, 2005. Claims 1, 3, 11-12, and 21 have been amended and claim 2 has been canceled. Therefore, claims 1 and 3-27 are pending in this application.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1,11-13 and 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato et al. (USPN 6,547,575).

Kato discloses a flexible printed circuit board (FPCB) connection mechanism configured to electrically connect two bodies 19,25 of a foldable type handset, the FPCB connection mechanism; comprising: a first connector 77 installed on a first body 19 and connected to one end of a first FPCB 79 of the first body 19; and a second connector 75 installed on a second body 25 and configured to connect to one end of a second FPCB 83,85,81 of the second body 25 wherein the first connector 77 is configured to rotate relative to the second connector 75 as the first body 19 is rotated relative to the second body 25 while the first and second FPCBS 79,83,85,81 connected

Application/Control Number: 10/627,806

Art Unit: 2833

respectively thereto are configured to remain in substantially fixed positions within the first and second bodies 19,25.

As per claims 11-13 and 21-23 these claims recite subject mater similar to claim 1; therefore, they are rejected under the similar rationale.

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 3-10, 14-20 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable by Kato et al.

As per claim 3, Kato does not explicitly disclose a connecting hole form on the first connector and a connection protrusion formed on the second connector. Kato does disclose the first connector (77) is formed in a substantially cylindrical shape with a connecting protrusion formed in the longitudinal direction thereof, and wherein the second connector 75 comprises a connecting hole formed in a substantially cylindrical shape configured to correspond to the connecting hole of the first connector, wherein the connecting protrusion is configured to be rotatably inserted into the connecting hole (see fig. 8). Therefore, it would have been obvious to one skilled artisan in the art at the

Art Unit: 2833

time the invention was made that the use of protrusion and hole can be reversely formed on the first connector and/or second connector and via-versa.

As per claims 4, 16 and 25, Kato discloses that the first connector further comprises a plurality of first electrodes 81 arranged on an inner circumferential surface of the connecting hole, and wherein the second connector further comprises a plurality of second electrodes 107 arranged on an outer circumferential surface of the connecting protrusion, and wherein the plurality of first and second electrodes are configured to contact each other when the first and second connectors 75,77 are coupled.

As per claims 5-10, 17-20, and 26-27, Kato discloses the first (second) connector further comprises a first (second) slot (1055) formed on an outer circumferential surface thereof, said first (second) slot configured to receive an electrode pin (107) formed extended at one end of the first (second) FPCB (79); wherein the first (second) slot is configured to be electrically connected to the plurality of first (second) electrodes.

As per claims 14-15 and 24, these claims recite subject matter similar to claim 3; therefore, they are rejected under the similar rationale.

- 6. Applicant's arguments with respect to claims 1 and 3-27 have been considered but are most in view of the new ground(s) of rejection.
- 7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xuong M. Chung-Trans whose telephone number is (571) 272-2002. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 extension 33.. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/627,806

Art Unit: 2833

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

X. Chung-Trans

SUPERVISION FAITH EXAMINE TECHNOLOGY CLINTER 2800